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The Belfry, Bruges, from the Rue aux Laines.

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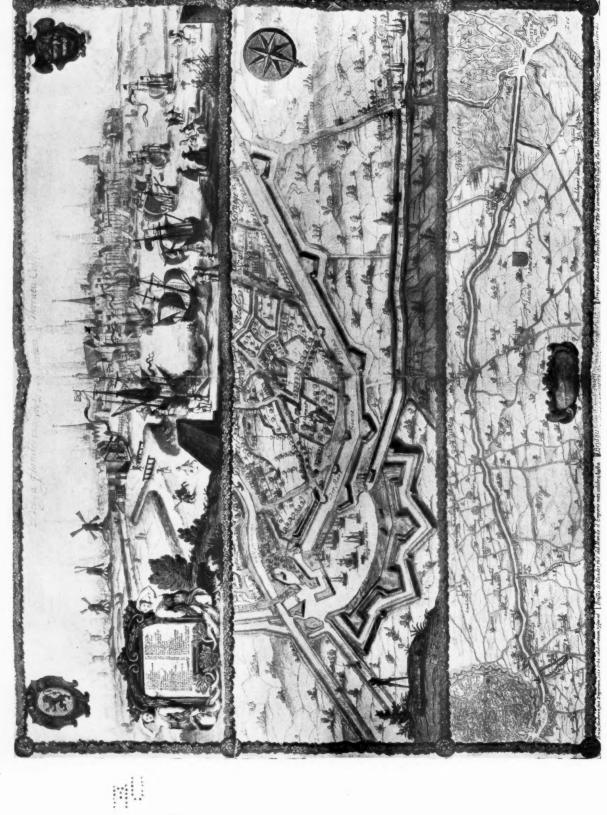


Plate I.

Dece

VIEWS OF BRUGES, AND MAP SHOWING THE OSTEND CANAL.

From an original Water-colour Drawing, circa 1661, now in the British Museum.

THE ARCHITECTURE OF BRUGES.—I.

By ARTHUR STRATTON, F.S.A., F.R.I.B.A.

N 15 October 1914 the enemy entered Bruges, and from that day to this the menace to the city has been most disquieting. At the moment, the advancing armies are in sight of the world-famed Belfry, beckoning to them across the plain, and it is futile to ignore the fact that the fate of the wonderful watergirt city hangs in the balance. The desolation in Belgium has been infinitely greater than anything that could have been imagined in the days before this flood of destruction burst upon the world: cities, towns, and hamlets have been pillaged and levelled to the ground

irrespective of the architectural and historical value of their buildings and the treasures they contained. Although communiqués tell of damage to the railway station and of fires in the neighbourhood of the docks, there is no reason to suppose that irreparable havoc has so far been wrought in the heart cf one of the most precious mediæval cities of Europe. It is not unlikely, however, that interest may again centre any day upon Bruges, as there is something more than a possibility of its being involved in some of the fiercest fighting of the War.

Bruges is unique. To speak of it as the "Venice of the North," as many writers have persisted in doing, betrays a lack of understanding of its predominant characteristics and tends to detract from its individual appeal. Bruges is no more like Venice than Chester is like Salisbury. Each owes its characteristics to the conditions underlying its growth; the waterways may be simi-

lar without their quay sides or shelving banks presenting any marked resemblance. Most British travellers have seen Bruges at one time or another and felt the glamour within its walls, but to understand its peculiar attractions it is necessary not only to be familiar with the appearance of the city in modern times, but to know something of its beauty at the height of its fame, and of the causes which led to its uprising and subsequent varied fortunes.

To conjure up visions of the beautiful is the poet's quest; to visualize stately buildings and noble monuments, to show the aspect of cities which once upon a time were aglow with all the art and beauty that man could devise, is one of the most fascinating recreations of the studiously minded architect. In the march of progress impelled by civilization, many towns and

cities, once centres of activity, throbbing with the life of countless thousands engaged in commerce and in manufacture, in the arts of peace, and, above all, in the art of living, have been left behind, stranded as the streams of prosperity have rolled to other shores. Such towns are Bruges and ruined Ypres,* once proud with their lofty towers proclaiming their power and independence for miles around, but in these latter days chastened, shorn of the greater part of their display, and mere shadows of their former splendour.

Bruges in the Middle Ages was one of the most powerful

communal cities of Flanders, exercising an immense influence over the fortunes of Western Europe at a time when cities now pre-eminent were little more than hamlets. Living amidst the plains and dunes of Western Flanders, the Flemings of those days were a hardy people, industrious and enterprising wherever commercial success was likely to crown their efforts. Conscientious in their work and religious by temperament, they brooked no interference with their rights and knew no bounds to their ambition. But to such an extent were they jealous of their rights as citizens of a free city that half the history of Bruges and the neighbouring cities of Ghent and Ypres in the Middle Ages is concerned with the struggles of the one to safeguard its interests against the inroads of the others. Rarely on speaking terms with one another, these three bonnes villes fostered feelings of local patriotism to such an extent that in

order to maintain their own freedom and to protect their commercial interests they often allowed their bitter feelings to govern their better judgment so far as to make them hate one another more than their outside foes. But loyalty to his own city was ever a ruling trait in the character of the Fleming, and differences were forgotten when the menace of a common enemy really threatened his liberty, as when the patriot Philippe Van Artevelde of Ghent led the men of Ghent and Bruges in combined force against the Counts of Flanders. This was in 1382, and Froissart records how Van Artevelde kept the state of a prince during his residence at Bruges, as well he might, for he had possessed



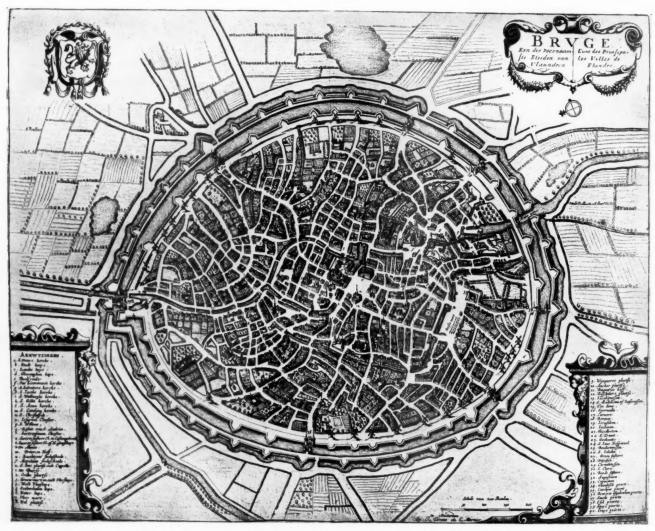
THE GRAND' PLACE AND PLACE DU BOURG IN 1562, AFTER MARC GHEERAERTS.

himself of all that was to be found in the sumptuous ducal palace.

The early history of Bruges is stormy and turbulent: it bristles with siege and strife, with battle and intrigue, with victories won and losses sustained; but through it all there stands out clear and bright the Fleming's love of freedom, to attain which he was willing-even as to-day-to sacrifice everything but his honour. His genius for commerce, his appreciation of beautiful things, and his determination to excel in whatever he put his hand to, were amongst his governing traits; and these traits, no less than the geographical position of his country and the natural formation of his terrain, have all left their mark on the building arts which the Fleming evolved. It could not be otherwise, but a just estimate of the architecture of Bruges cannot be arrived at without an understanding of the causes which tended to shape it. Civic pride, commercial instinct, religious zeal, and an extraordinary vitality which impelled him to do nothing by halves, combined to make the Fleming what he was. Being by nature imaginative and whole-hearted, intensely responsive to the varied calls of a full life and a lover of beautiful things, he shared with all other peoples the world over the desire to give expression to his ideals by the erection of buildings in which should be embodied the spirit actuating the individual no less than the community at large. He was not alone in his religious zeal,

for that swept over the whole of Europe like a mighty wave, and in every land the Middle Ages have bequeathed great and wonderful works of architecture which were the direct outcome of that extraordinary burst of enthusiasm for religious expression; but nowhere in Northern Europe can one point to such a series of civic and commercial buildings as those erected to serve the needs of the Communes and to proclaim the pre-eminence of the Flemings in the thirteenth, fourteenth, and fifteenth centuries. Nowhere else were all the conditions calling for a systematized civic architecture so strongly in evidence.

Strange as it may seem, church building almost took a secondary place for a time—not that large and finely conceived churches were not erected, but that ecclesiastical work was eclipsed by the town halls, belfries, market halls, and all manner of secular buildings which arose in response to the calls of civic splendour and domestic affluence. The inevitable tendency to borrow motives from the church builders of Northern France, where the master-masons were showing to the world what could be done with pointed arch and soaring vault, was too strong for the Flemish church builders to resist; but the case was different in regard to civic architecture, and a manner was evolved bearing very strongly the impress of local characteristics. So strongly, in fact, were these developed that they differentiate the architecture from that of any other



MAP OF BRUGES IN THE SIXTEENTH CENTURY, SHOWING DOUBLE MOAT AND FORTIFICATIONS ENCIRCLING THE CITY.

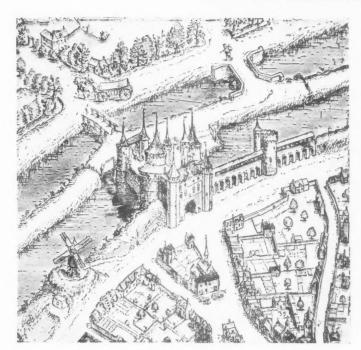


From the Rue aux Laines.



Photos: F. R. Yerbury

From the Grand' Place,



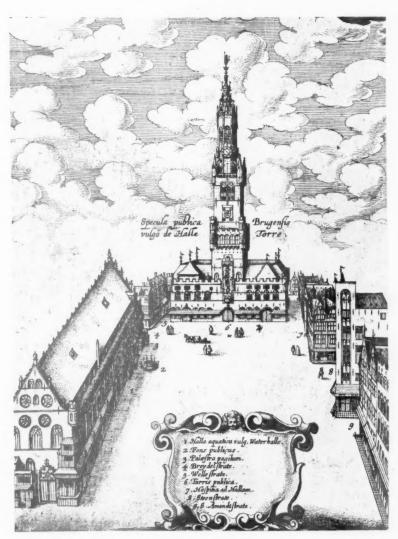
THE PORTE SAINTE-CROIX IN 1562, AFTER MARC GHEERAERTS.

country. First the belfries and Halles, and later the town halls and town houses, show this architecture at its best, for the Flemish builders were concerned primarily with towns and cities. It is in the open squares and along the narrow streets and beside the busy quays that one must seek the soul of the Flemish building craft, rather than in the open country or in the streets of the wayside villages.

The secret of the civic and commercial supremacy of Bruges lay in its geographical position in relation to the open sea, and in the astuteness of the Fleming in grasping to the full the advantages of the innumerable waterways which linked up the sea with the sites he chose, for in mediæval times water-carriage constituted the most efficient mode of transport for merchandise of all descriptions. Natural waterways and artificial canals opened the door for overseas traffic, and by their means trade could be carried on with all known European ports-and especially with those coming into prominence on this side of the Channel -once the production of some indispensable commodity had been developed. Skilled in weaving all kinds of woollen stuffs, the Flemish weavers gained a wide reputation at a time when the rest of Northern Europe was either ignorant of the process or engaged in other pursuits. Their supply of the raw material was limited, and without ships to bring the raw wool and to take away freights of woven material they could not have expanded, and without canals and waterways the ships could not have sailed up to the very doors of the emporia and have been moored alongside quays alive with the busy throng of workers. The solution of the problem lay in the assurance of an unlimited supply of wool. England produced the greater part of the wool, and the prosperity of England and Flanders was interdependent; for all the south-eastern part of England, nearest to Flanders, was given over to the production of wool and to increasing facilities for shipping, while the looms of Flemish cities buzzed with the output of costly stuffs.

Thus, while the burghers were rearing belfries to proclaim far afield over the level country the prosperity and independence of the little republics of which they were such loyal members, the merchants were organizing overseas trade and developing a far-reaching industry which seemed to bring wealth and prosperity to all concerned in it. Also they were rearing halls for the transaction of their business and palaces for their dwellings.

The Hanseatic League, which was at first an association of individual merchants and later of merchant cities, wielded great powers, and the influence of this immense trading organization was felt all over Northern Europe from the early thirteenth right down to the end of the sixteenth century. In Flanders, at Bruges, Antwerp, Dinant, Ghent, Ypres, and Damme-the port of Bruges-were emporia of the League associated with London and other English centres, and in commercial relations with towns in all countries of Northern Europe. The intercourse between Flanders and our eastern ports was in a large measure answerable for the prosperity of East Anglia, and led in due course, from one cause and another, to the importation not only of ideas but of workers as well, and as a consequence our building arts profited very materially by the interchange of Flemish craftsmen. So long as there were no hindrances to the carrying on of the overseas trade all went well, but the maintenance of the waterways was vital.



VIEW OF THE GRAND' PLACE ABOUT 1640, SHOWING THE TERMINATION TO THE BELFRY AND THE WATERHALLE (BOTH NOW DESTROYED).

This is forcibly brought out in the story of Bruges, for in spite of turmoil brought in the train of political and religious strife, the surest blow ever dealt at the prosperity of the city came through natural causes such as no man then could combat.

It was no new danger which was threatening the watergirt city in the fifteenth century-the shifting sands of the Swyn sealed her fate. The natural waterway which flowed from the sea past Sluys to Damme and so to the north-eastern quarter of Bruges silted up faster than means could be devised to keep it clear. The time came when ships of any considerable size could only reach the quays with extreme difficulty, and the day followed when they could not get there at all. After the silting up of the Swyn valiant efforts were made to broaden and deepen minor waterways. In the reign of Charles V, the painter - architect - engineer Lancelot Blondeel (1496-1561) urged a scheme which was eventually abandoned, although in modern times recourse has been had to a similar project. Another attempt was concerned with the waterway which ran from the northern part of the city to join the open sea at Ostend. It is this canal which is recorded in such a delightful manner in the original water-colour drawing made presumably between the years 1664 and 1668 and reproduced on Plate I. The inscription on this drawing in quaint English and in four other languages runs: "Bridges before the troubles was a city famous for traffic throughout Europe: 17 outlandish nations from ancient times had their consul houses therein. It doth now again begin to recover its former splendour thro' the bounty of his Cath: Majte: and the order of his Excy. the Marquis of Castel Rodrigo, by the inlargin of the river of Ostend with the waters of the Flemish ocean, 18 foot in depth capable of vessels of 200 tunne, with a spacious harbor free from all stormes and inconveniences of ebbings and flowings, a fit place for the

repairing and building, and a large Kay for landing and loading of goods, all which is compased with strong fortifications." It will be seen from this drawing and from the map reproduced on page II2 that the city is encircled by canals and natural or artificial waterways; it seems to have reached the limits of expansion, as defined by these waterways, towards the end of the thirteenth century.

Apart from the vital importance of such means of communication to the furtherance of commerce, it must not be forgotten that in early times a belt of water provided one of the most valuable means of defence from the onslaughts of outside foes. Just as all through the Middle Ages a moat was looked upon as the readiest way of protecting a castle or a dwellinghouse situated in flat country—till the introduction of cannon made such defensive methods useless-so the encircling canals were the best means of natural defence to these Flemish towns, and the burghers knew it. The system of further protecting the town by means of strong encircling walls seems to have been very completely carried out at Bruges, and a number of fortified gatehouses were disposed at suitable points for ingress and egress. The amazing irregularity of the lay-out of the town as a whole arose, doubtless, through a desire on the part of the early builders to conform as far as possible with the turnings and twistings of the internal canals no less than with those of the little river Reie, which necessitated many bridges. Although many of these canals have been filled up or diverted, the mediæval irregularities of the streets have never been lost; of the encircling walls and fortifications, some four and a half miles in circumference, practically nothing has survived, but considerable remains of four of the six principal gatehouses or portes are still to be seen.* Several fine buildings, too, were

 \ast The walls were razed in the nineteenth century, and the old ramparts turned into promenades.



HOUSES ON THE NORTH SIDE OF THE GRAND' PLACE.

swept away during the evil days that marked the period of decline, and many others were long ago mutilated almost beyond recognition; in fact, without a wonderful bird's-eye view of Bruges, engraved by Marc Gheeraerts in 1562, one would be at a loss to fill in many links which are obviously missing.

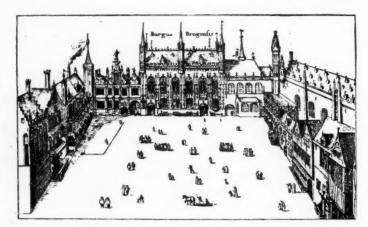
In those days interest circled chiefly around the Grand' Place and the Place du Bourg. All the world knows about the Grand' Place and its Belfry, for surely those who have not heard the carillon with their own ears have read the lines written by Longfellow and many another poet. But it is not so generally known to what an extent the Grand' Place has been robbed of the greater part of its charm through the vandalism of later ages. The canal which formerly ran along the east side of the Belfry and beneath the Waterhalle, as seen in Gheeraerts' view (illustration on page III), has been filled up, and the Waterhalle itself demolished, with the result that the principal Place has lost much of its character. It was naturally in the Grand' Place that the most stirring scenes in the grim early history of Bruges were enacted, and that the most sumptuous pageantry was displayed in the triumphant days which characterized the period of Burgundian rule.

The foundations of the existing Belfry seem to have been laid about 1290, and the wings, which form the Halles and

enclose a courtyard, as at Ypres, were added in 1364. It was not till late in the fifteenth century that the square Belfry tower was carried higher by the addition of an octagonal lantern and a lofty flèche (illustration page 113). This metalcovered flèche was struck by lightning in 1493, but it was quickly set up again and surmounted by a huge vane which most authorities agree was in the form of the Lion of Flanders. The Belfry with such a rich termination must have been one of the most gorgeous monuments that ever pierced the western sky, but since 1741 it has been robbed of its proper culmination, for no attempt has been made since its destruction in that year to reinstate so vulnerable a feature, and the existing commonplace parapet and eight-angle pinnacles have had to suffice for just ninety-five years. Scarred as this building unquestionably has been in the past, it is still a monument historique of the first importance, and the interior courtyard with its gallery at the southern end is unusually impressive. Within its walls at the outbreak of war was one of those priceless collections which throw so much light on the lost art and craft of building in a locality, and which the Belgian people, with admirable zeal and devotion, had preserved for the enjoyment and enlightenment of all who shared with them their appreciation of a bountiful heritage of beautiful things. One trembles to think of what may have happened to many treasures of the smith's craft, and even to Marc Gheeraerts'



VIEW IN THE RUE FLAMANDE, WITH THE BELFRY IN THE DISTANCE,



THE PLACE DU BOURG, SHOWING THE HÔTEL DE VILLE, ANCIEN GREFFE, AND CHURCH OF ST. BASIL.

original copper plates, which had survived all manner of misfortune; while rumour says that the bells which for so long had given out their notes from the topmost stage of the Belfry have already gone the way of most things metal in these ruthless days.

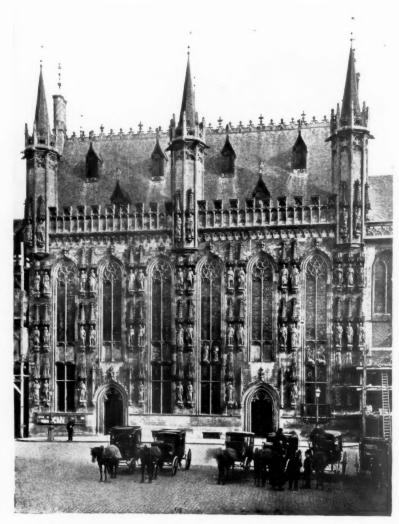
On the west side of the Grand' Place, one building at the angle of the Rue St. Amand has come through all the changes with remarkably little alteration; this is the Hôtel Bouchoute, erected in the latter part of the fifteenth century in the severe manner of the earlier brick façades. This building is seen in the view reproduced on page 113, and, with its metal vane showing above the flat roof, is a familiar object in old paintings and prints of the Place. The remaining façades on this side have all been more or less modernized, and the façades on the north side, facing the Belfry, are noticeable for their picturesque array of gables rather than for any attempt to arrive at a studied composition (see illustration, page 114). The site of the church of St. Christophe has long since been built upon, and there is not much to detain the architect hereabouts when he has once realized the value of such a great open space in the midst of countless tortuous

Around the other Square or Place du Bourg were grouped some of the finest buildings in Bruges. The Hôtel de Ville, the Ancien Greffe, the Palais du Franc -which supplanted the Loove Palace, and on the site of the greater part of which now stands the Palais de Justice-the church of St. Basil with the chapel of Saint-Sang, and the cathedral of St. Donatian, all stood here. These have survived in some form or another with the exception of the cathedral on the north side, an idea of which is obtained from Gheeraerts' view (page 111). From all accounts this must have been a striking early Gothic church, inspired by French models; but it was swept clean away by the French revolutionists at the end of the eighteenth century, and rows of chestnut-trees now cast their shadows on the site.

The Hôtel de Ville, illustrated on this page, bears externally as many signs of ill-usage as the Belfry; it was begun in 1376, but it was not until the fifteenth century that the whole building was completed with its rich series of stone traceried windows and sculptured niches. The angle turrets, beloved of the Flemings, are conspicuous here; but there seems to

be no justification for the central turret, as there is nothing in the orderly division into bays of the whole façade to call for the accentuation of the central pier. The architecture of Bruges, however, is not academic, for reasons that will be discussed later. Bruges owes much to the exuberant character of Flemish craftsmanship, and it is seen in this façade no less than in those adjoining it; but the restorer's hand has perforce been busy, and evidences are not difficult to detect. The statues now filling the niches are modern works, but the originals were from the chisels of the best craftsmen, and it is recorded that Jean Van Eyck with his own hands painted and gilded six of them. The interior will be best remembered for the elaborate wood roof with pendants, dating from 1402, and for the fine scheme of colour decoration carried out by Albrecht de Vriendt, and completed by his brother Juliaan, about the year 1895. These wall paintings on a large scale depict some of the memorable scenes which have left their mark on the early history of Bruges, and include the "Return of the Brugeois from the Battle of the Golden Spurs at Courtrai in 1302"; "Count Louis de Maele laying the foundation of the Hôtel de Ville in 1376"; "the Magistrates of Bruges renewing the privileges of the Hanseatic League"; the "Opening of the new Swyn Canal in 1404"; and the "Foundation of the Order of the Golden Fleece by Philip of Burgundy at Bruges in 1430." It is to be hoped that no harm will befall this monument of native art.

(To be continued.)



THE HÔTEL DE VILLE IN THE PLACE DU BOURG.

"HOMES OF REST": ALMSHOUSES AS WAR MEMORIALS.-I.

By MERVYN E. MACARTNEY, B.A., F.S.A.

T is a pleasant custom of most civilized peoples to wish to commemorate great events in the life of the nation or their own by some tangible expression of their feelings—often by the foundation of public buildings for the relief of those less happily endowed with this world's goods. These endowments take various forms; in mediæval times, of colleges for education, such as are found at Oxford and Cambridge; also of almshouses for men and women of decayed fortunes. These we light upon scattered through the length and breadth

of the land. Few towns there are that do not possess some such institutions—founded in most cases by pious individuals for the relief of poor or infirm residents of the various parishes where they are located.

Unfortunately, administration their often fell into wrong channels and led to grave abuses; hence the creation of a Central Board for their control called the Charity Commissioners. Whilst this change in the administration of these funds produced greater efficiency, it also produced a divorce between the local and personal character of these endowments. Hence the feeling has arisen that, though a man might grant money, lands, and building for his neighbourhood, all might be gradually absorbed in a body administered from a distance and without the direct and intimate connexion of

particular place or district. The natural result has been that benefactions of this kind have almost died out.

The fear that the foundation of a home for the decrepit members of a parish, however carefully the deed of gift might be worded, might in time be turned to some other purpose, seems to have dried up this fount of benevolence. This is a great loss to the community, and especially so at the present time, when a large field for the exercise of such generosity might be most usefully employed. Owing to the widespread bereavement amongst persons of wealth, a natural and native desire to commemorate the loss of a member of the family by erecting some permanent memorial that would alleviate the con-

ditions of the community in which they live has been frustrated. With the object of advocating the encouragement of this idea, I introduce the subject in this number, and have brought together views of some of these buildings to show how interesting and beautiful they can be made.

Some would say that by endowing a cot in a ward of a hospital they would thereby achieve their intention; but a hospital in a county town is not the same thing as a group of almshouses for a village. The personal note is absent.

A memorial window in a church has no effect in ameliorating the lot of those stricken in the War or the fortunes of those left to battle with the world. But, by providing a home and a garden, much can be done to soften the rough edges of adversity.

The purpose of this article is to enter a plea for the favourable reconsideration of this subject on various grounds. For one thing it means the revival of a thoroughly English sentiment, and the consequent benefit to the community by the erection of permanent dwellings for those stressed by this disastrous War. It is a large subject to cover in a short article, but an outline of what might be done may be briefly set out here.

How the subject has been dealt with by our ancestors is both interesting and instructive. The construction of society has altered in the course

altered in the course of time, and the middle classes have been left in a sort of backwater, unregarded by those of wealth and by the Government because from a variety of causes—partly pride, partly because they are politically unimportant—they are inarticulate. Through pride they shrink from advertising their necessities, and do not combine to force their claims on the Government, as working classes do through trade unions and strikes—they cannot dig, and to beg they are ashamed. As a result, when misfortune overtakes them they are powerless to weather the storm.

When this War ceases a vast number of widows and fatherless children will be left adrift at the world's mercy. The



MORDEN COLLEGE, BLACKHEATH.
Sir Christopher Wren, Architect.

pension in many cases will not suffice to keep them in the condition of life that they have been brought up in. Homes of rest for those whose fortunes have been wrecked should appeal to the generosity of those whose means have been augmented by the War or left practically undiminished. Already cases of this kind are becoming too frequent, and they will increase. If a scheme for the improvement of the material condition of those broken in the War can be started a really beneficent work can be set on foot.

MORDEN COLLEGE, BLACKHEATH, KENT.

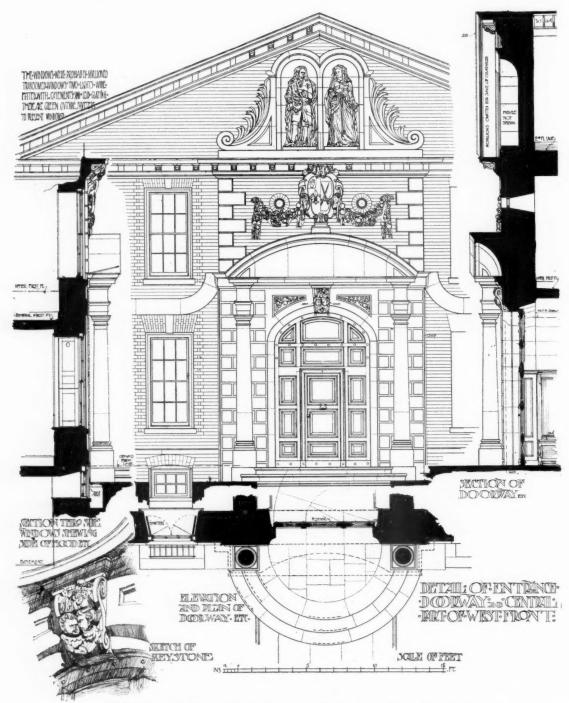
The following interesting particulars are extracted from an article on Morden College by Mr. T. Frank Green, which appeared in the Review some years ago.

The college stands very much as originally built, hidden

away in its own grounds in the south-east corner of the heath; and a casual visitor would hardly be aware of its existence. It was founded about 1695 by Sir John Morden, Bart., as a home of rest for reduced gentlemen, merchants of the City of London, for whose relief, of all the foundations in and about London for distressed people of all sorts, there had been none erected before. Sir John himself had tasted adversity, and had a fellow-feeling for those who might be likely to feel the pinch of want.

He appears to have been the only son of George Morden, Esq., of London, citizen and goldsmith, and Mary, daughter of Thomas Harris, Esq., of London. He was created a baronet in 1688, and the title died with him.

A record in the Heralds' College gives the date of his birth as 23 August 1623, but the parish register of St. Bride's,



MORDEN COLLEGE, BLACKHEATH: DETAILS OF MAIN DOORWAY.

Measured and drawn by T. Frank Green. Details of Door measured by A. J. Healey and drawn by A. Bough.



Plate III.

MORDEN COLLEGE, BLACKHEATH: MAIN DOORWAY.

Sir Christopher Wren, Architect.

December 1917.



London, in which parish he was born, mentions the date as the 13th. Such registration errors, however, are not unknown even in recent times. In the register of pedigrees of the Heralds' College bearing his arms and crest and attested by his signature, he does not trace his ancestry higher than his grandfather, Robert Thurloe, of Suffolk, nor does the certificate of his death drawn by the Somerset Herald of Arms contain more than mere mention of the names of his father and grandfather, whereas it enters minutely into the kin of Dame Susan, his wife, the daughter of Joseph Brand, Esq., of Edwardstone, Suffolk, and gives the names and matrimonial alliances of her brothers and sisters and the names of their descendants.

Stow gives the arms of Simon Morden, Mayor of London in 1369, which are the same as those borne by Sir John. They are: argent, a fleur-de-lis gules, with the arms of Ulster, with crest a lion passant; those of the Brands, his wife's family, being azure, two swords in saltire argent, the hilts or, with a border engrailed of the second.

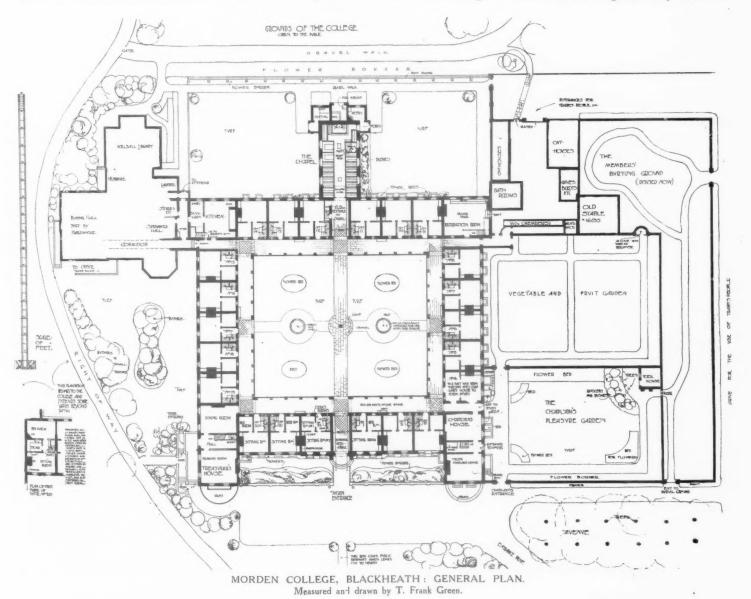
At the period of Sir John's entry into commercial life, the members of the Turkey Company were carrying on an extensive trade with the Levant in woollen cloths, lead, pewter, copperas, logwood, and pepper. They also took out with them dried fish, sugar from British colonies, and other produce, which being sold in Portugal, Spain, and Italy for pieces of eight, gave them the wherewithal to purchase homeward cargoes.

Sir John became a member of the company, and was very successful in his transactions, entering into them personally, and even undertaking a voyage to the Levant, where he is supposed to have resided for some time, Stow saying that he returned from Aleppo with a very fair estate.

He at this time enjoyed great worldly prosperity, and owned many ships; but the tenure of riches was then, as ever, precarious, and he lost the whole of his property and was reduced to poverty. It seems, from some expressions in his will, that his fleet was lost at sea.

In addition to defraying the cost of building the college, Sir John also amply endowed it by his will of 15 October 1702 with the whole of his estate, both real and personal, subject to a few small legacies and to a sufficient income and property being retained by Lady Morden during her life to enable her to live in a style befitting her position, the whole being at the disposal of the college at her death. These dispositions occupy the first part of the will, the remainder dealing with the endowment and foundation of the college, its rules and officers, its management, and the pensions to be paid to members. Mention is also made of the "gownes all alike" which they are to wear.

Unfortunately no pictorial record of these seems to exist, and a writer in "The Stranger's Guide" of 1787 said that even at that date the gowns with founder's badge formerly worn had



been discarded for some years. The badge was of silver, oval in form, bearing the arms of Morden and Brand.

There were to be in the college as many poor merchants as the foundation would maintain, who were to have rooms and £20 yearly each. The officers were to be a treasurer at a salary of £40 a year, a chaplain at a salary of £30 a year, each residing in the college; further a cook and butler, the latter also to be clerk of the chapel, were also to be provided at £10 a year each, with board and lodging.

The management was to be in the hands of visitors or trustees appointed by the will (including Sir John's wife, Dame, or Lady, Susan), for whose entertainment during the yearly visitation a sum of £10 was to be set aside, to be expended in a dinner for themselves and provender and stabling for their horses; and rooms were also to be provided for the reception of the visitors.

At the decease of any two of them, other Turkey merchants were mentioned as their successors. At the death of these, further trustees to fill the vacancies were to be chosen from the Turkey Company to keep the number up to seven, "and if that Company fail," says the will, then they should be chosen out of the East India Company; "and if that Company fail, then out of the Court of Aldermen of the City of London, and if the Court of Alderman fail" the visitors then surviving



JESUS HOSPITAL, BRAY, BERKS: FRONTAGE TO ROAD.

should at the death of any one of the seven choose a gentleman of Kent to fill the vacancy.

A codicil states that as the House of Commons has rejected his application for a remission of taxation for the college, he is obliged to reduce the yearly pension to £15; and after his death, "some portions of the estate not answering as well as expected," Lady Morden was obliged to reduce the number of members also, which, however, at her decease was

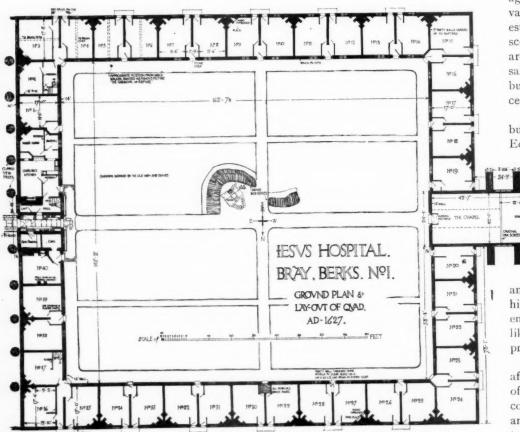
again increased. The increase in the value of the property held by the estate has since much enlarged the scope of the charity, and not only are the pensions to members and salaries of officials now more liberal, but a number of out-pensioners receive relief.

To return to a consideration of the building itself. It was carried out by Edward Strong as master mason,

and the details suggest that the general scheme, which is masterly, was alone supplied by Wren, and that in this case he did not supply drawings of the "mouldings in great," as he has recorded his willingness to do for

another and more important work of his; and it cannot be said that the entrance doorway reaches anything like the standard of its supposed prototype at Bromley.

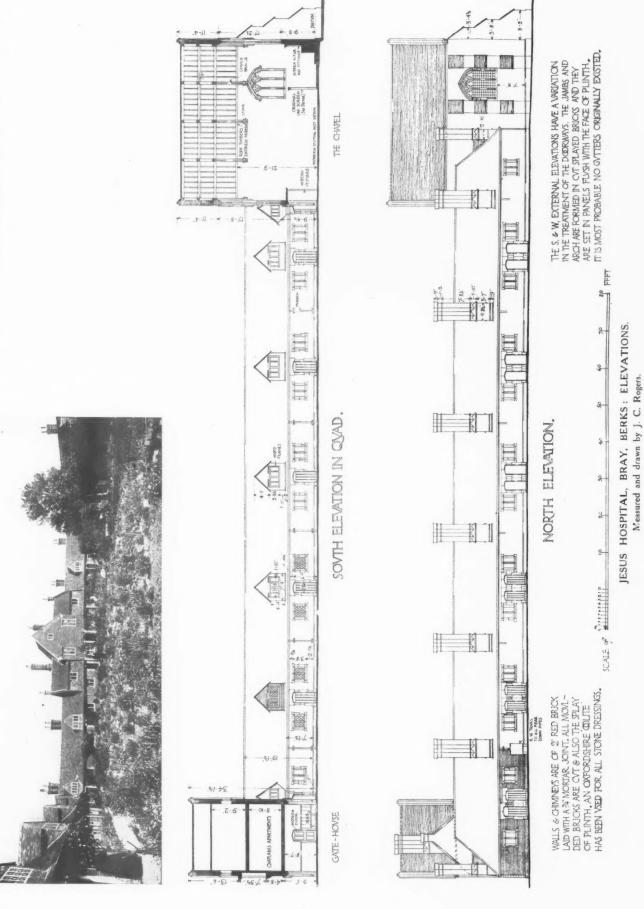
The similarity between the two affords strong evidence that the door of Morden College was actually copied from the last-mentioned example; otherwise it would be difficult to explain the inferiority of the Blackheath design. A badly made sketch by Strong would account for this.

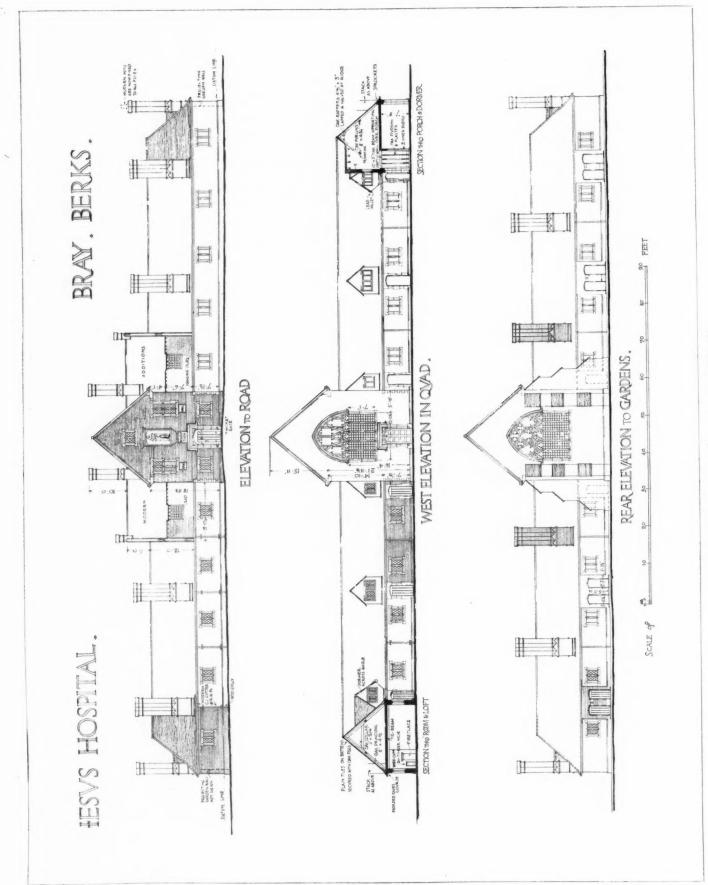


JESUS HOSPITAL, BRAY, BERKS: GROUND PLAN AND LAY-OUT OF QUAD.

Measured and drawn by J. C. Rogers.

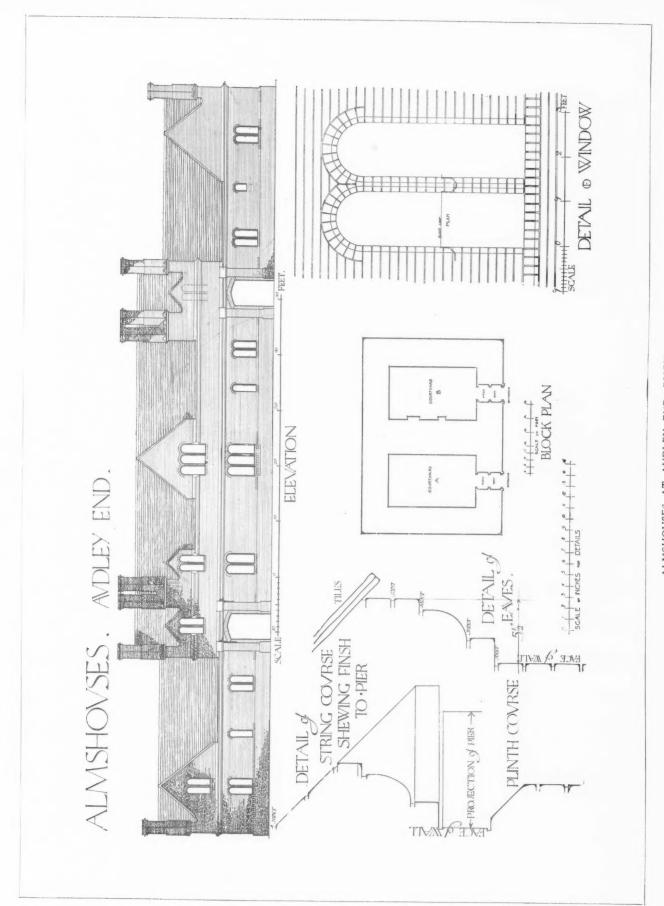
HESVS HOSPITAL, BRAY, BERKS.





JESUS HOSPITAL, BRAY, BERKS: ELEVATIONS.

Measured and drawn by J. C. Rogers.



ALMSHOUSES AT AUDLEY END, ESSEX.

Measured and drawn by H. A. McQueei.

The walling generally is of brown bricks, with red quoins to window openings and at angles of chimney-stacks, etc., the body of the latter, however, being of yellow stock brick. The cornices are of wood and the strings are of stone, like the quoins at angles of the west front. Both stone and woodwork are painted a cream colour, and the effect is quiet and good.

The main entrance is flanked by stone columns carrying a segmental stone hood, and the door is enclosed by a three-centred arch. The keystone is carved with cherubs' heads, and the spandrels have rather poor carving of naturalistic type.

The door itself, of oak, is well moulded, and has a postern for occasional use, a flight of three semicircular steps leading to the entrance. Above, on a cartouche, are the arms in heraldic colouring of Morden and Brand, flanked by swags of fruit and flowers, carved in stone and painted.

In the pediment over are niches, containing figures of Sir John and Dame Susan Morden, "which afford correct instances of the costume of a man and woman of rank at the court of Whitehall." They are in stone, painted, and the former was inserted by Dame Susan after her husband's death in 1708, her own statue having been added by the trustees at her death in 1721.

JESUS HOSPITAL, BRAY, BERKS.

Walker's picture, "The Harbour of Refuge," was actually inspired by the buildings at Bray, and a star is marked on the accompanying plan (p. 120) showing the approximate position from which the picture was painted. Certain liberties have been taken by the artist in his delineation of the enclosed garth; the pump with its sheltering box edges has been left out, and a

statue has been put in its place; the whole is made more formal, to give breadth to the picture; but the old worn red brick, touched by the setting sun, is painted with fidelity.

Jesus Hospital (or almshouse) was founded in the year 1627 by William Goddard. Lysons's "Magna Britannia" gives the further information that it was "for forty poor persons, six of whom must be free of the Fishmongers Company: these have an allowance of twelve shillings a week if married, seven if single.

"The remainder of the pensioners must be persons fifty years of age, who have been householders in the parish of Bray for twenty years: their allowance, two shillings a week. They have all wood and coals, and a gown or coat every year."

The buildings are disposed around a large quadrangle. In the middle of the front, facing the east, the entrance to the "quad" is place. To give some importance to this feature the building is much higher at this part; indeed, it is almost as tall as the chapel, which is built on the axis of the entrance.

A niche is arranged over the door, containing a statue of the donor which is endowed with a curious comeliness of quiet beauty.

The arrangement of the rooms (only one room deep, and with windows front and back) is such as to allow the sun to touch every one.

The fireplaces are large compared with the size of the chambers: little cupboards for the "wood and coal" are placed at the sides.

Besides adding materially to the comfort of the inmates, these substantial corners are capable of carrying the fine









ALMSHOUSES AT AUDLEY END, ESSEX.



FORD'S HOSPITAL, COVENTRY: VIEW IN COURTYARD.

From the Shetch by Mervyn E. Macartney, F.R.I.B.A.

chimney-stacks which give so much character to the roofs. No feature is more English than this, and none susceptible of more various treatment. It is curious how little is made of it to-day, when no part of architecture is so starved and feeble. In these almshouses the stacks are arranged (always on the outer slope of the roof) in groups of two placed diagonally on a kind of plinth. They are all built of small bricks without ornaments beyond those trifling ones affected by the bricklayer—oversailing courses and steeply sloped weatherings; but the effect is charming. The slope of the roof to the quad has dormer windows in it to light the lofts, and it also serves to light the porches.

It will be noticed that one door from the quadrangle goes into two rooms by means of a small porch, into which the party-wall butts. The party walls, for greater security against fire, are taken over this porch, carried on an oak beam, and go into the centre mullions of the dormers.

Stonework has been used sparingly—for the facing of doorways and windows, and the copestones to the gables.

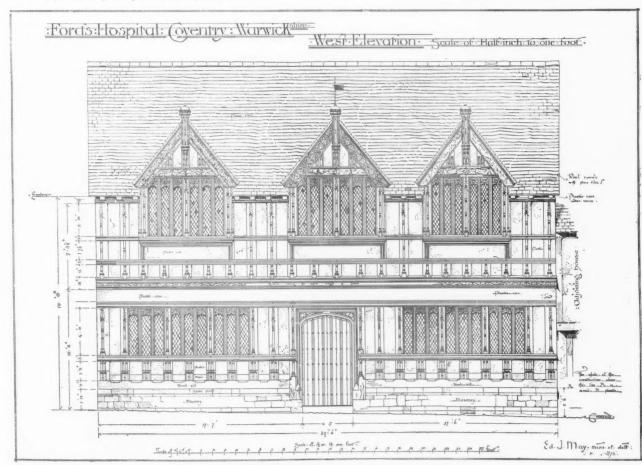
ALMSHOUSES, AUDLEY END.

The almshouses at Audley End offer a good example of quiet and appropriate brickwork design. The houses are built around courtyards, which are entered by arched gateways. The brickwork of the stables at Audley End House is a charming example of similar work—a type that, unfortunately, is badly neglected at the present time.

FORD'S HOSPITAL, COVENTRY.

Ford's Hospital, situated in Grey Friars Lane, Coventry, is an excellent example of fifteenth-century wood-and-plaster work.

(To be continued.)



FORD'S HOSPITAL, COVENTRY: WEST ELEVATION.

Measured and drawn by E. J. May, F.R I.B.A.

A STUDY IN CATHEDRAL DESIGN.

By THOMAS RAYSON, A.R.I.B.A.

THIS design has been evolved from a study of various mediæval buildings in England and France, and it originated in a desire to produce a tower after that of St. Rombaut, at Malines. In order to do this, and to make

the tower an integral part of a complete structure, Ely was taken as a general type, so that the tower could have a position at the west, where its lines would rise from the ground.

The dimensions of the cathedral may be compared with those of existing cathedrals, among which it would range with the smallest. The span of the nave is 28 ft., as Lichfield and Norwich (Ely is 39 ft.), while the height, 65 ft., is higher than Lichneld, 57 ft., and lower than Norwich, 83 ft. The length, 380 ft., is about the same as Exeter, Chester, and Chichester; though most, such as Winchester, Ely, Canterbury, Norwich (with Lady Chapel), are about 500 ft., or more.

The proportions of the tower approximate those of Malines, the contour of whose buttresses. which gives the delightful outline, has been studied, and a similar effect attempted with English detail. A very important factor is the manner in which the wall face recedes and heavy shadows are produced. The treatment of the upper stages, though suggested by Malines, uncompleted as it is, has been worked out in the character of

the fine Somerset towers, more especially Batcombe, St. Cuthbert's, Wells Cathedral, Evercreech, and Bishop's Lydeard.

At the base of the tower is a porch, which in the perspective resembles Hereford north porch; but, on further consideration, this was given up in favour of that at Peterborough. Low western transepts support the tower, as at Ely, with corner turrets.

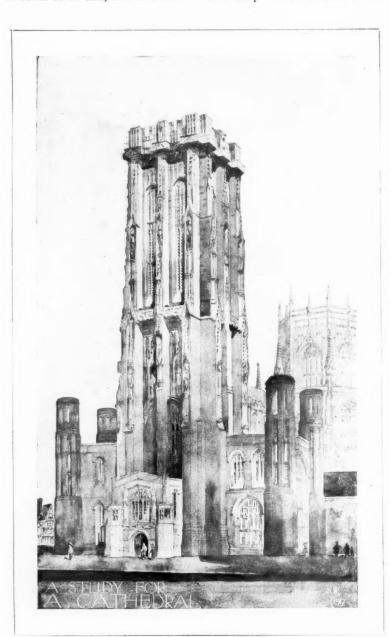
The exceedingly rich effect of three walls rising one

behind the other as the distance from the eye lengthens, can be seen in St. Mary's Church, Oxford, and is produced by the south aisle, clerestory, and tower. This suggested the adoption of a double aisle on the north side of the

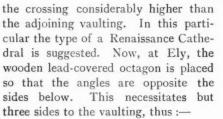
nave. By lighting the triforium as at Westminster, and instead of heightening the aisle wall for the purpose as the builders did there, by moving out the aisle wall one bay and constructing the triforium wall on arches, a continuous edition of the rich Oxford University Church effect is attained. Two bays of this elevation have been drawn. Lighted triforia are fairly common, for Ely, Durham, and Chichester have them; they are found also in France - Coutances, Reims, Chalons-sur-Marne, Amiens, etc.

The internal treatment of the nave is an effort to combine the elegant proportions of the inadequately lighted Canterbury nave with the fine clerestory at Winchester. The vaulting is of the quadripartite form, and covered with a steep castlead roof as at Ely.

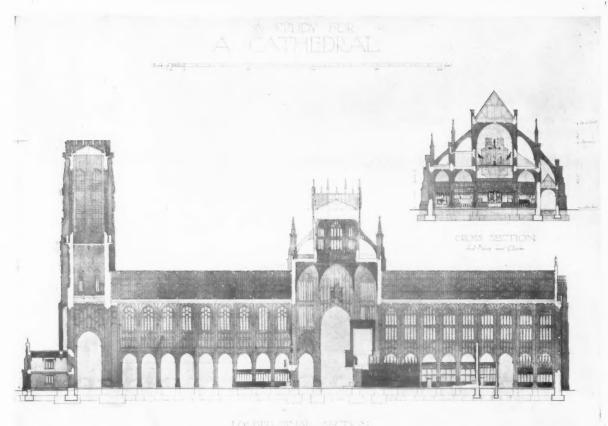
The main transepts are of the same span as nave and choir, i.e. 28 ft., and the plan of the crossing is nearly an octagon. At Ely, the sides taking the arms of the building are much larger than the others which are pierced with windows. The windows have been enlarged and raised in this design, making



VIEW FROM THE SOUTH-WEST.









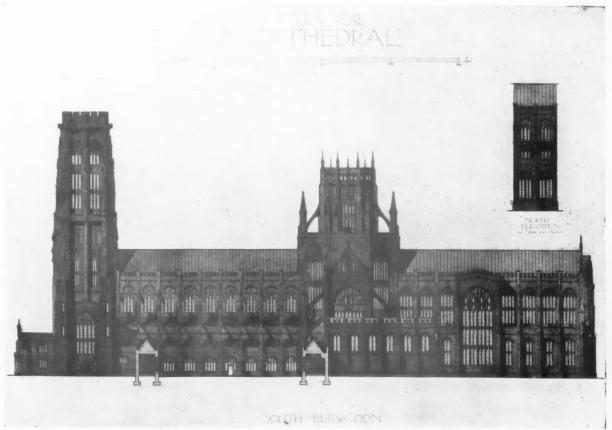
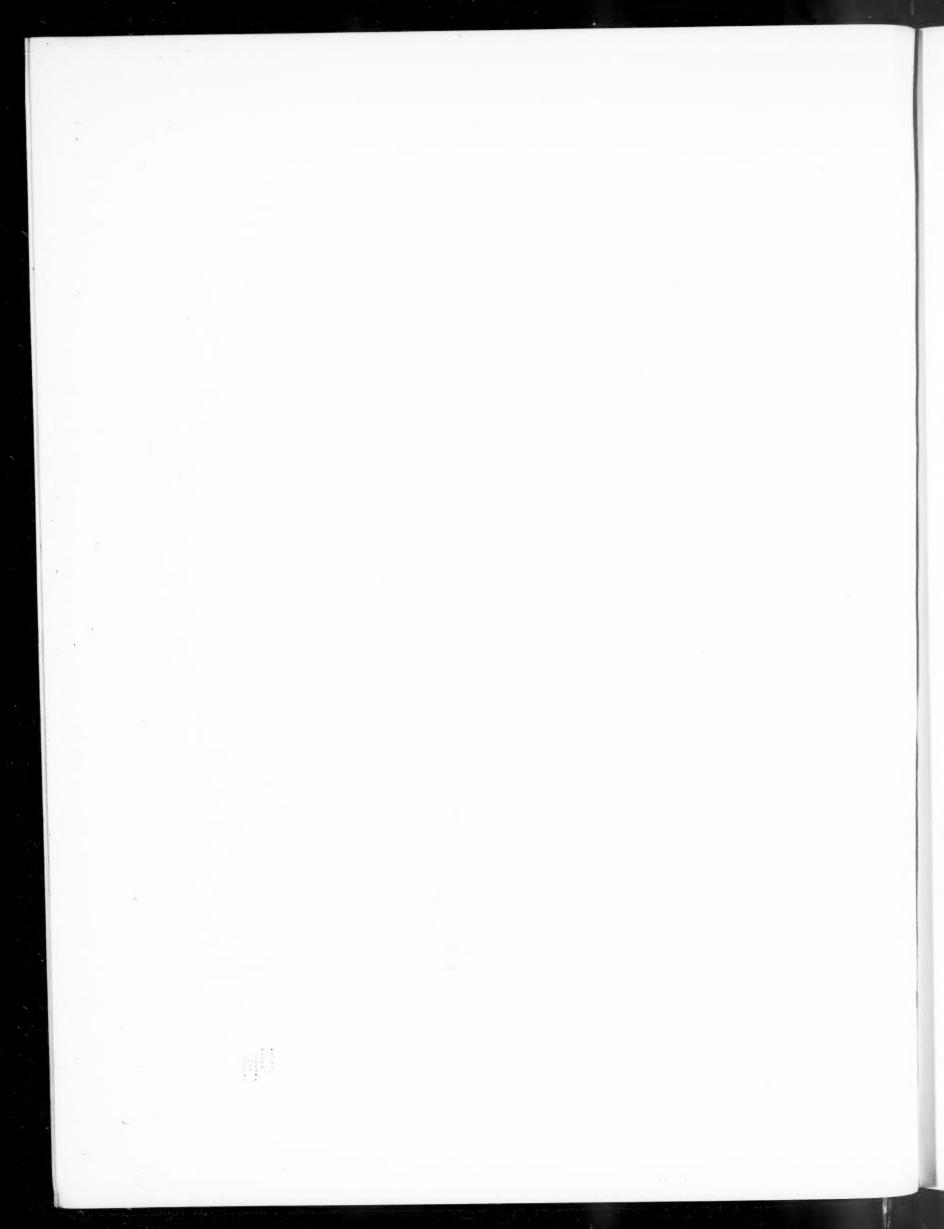


Plate IV.

A STUDY IN CATHEDRAL DESIGN: LONGITUDINAL SECTION AND SOUTH ELEVATION.

By Thomas Rayson, A.R.I.B.A.



whereas by placing the octagons parallel the vaulting becomes thus:— $\,$



This vaulting and all that covers the crossing are of wood.

The triforium has been omitted in the choir, and the design is based on the Malvern choir. As at Winchester and St. Albans, an elaborate stone reredos enables the high altar to be kept free of the east end, which, as at Durham, York, and Lincoln, is square, and is provided with chapels. As at York, an eastern transept rises from the south choir aisle and lights the high altar and reredos.

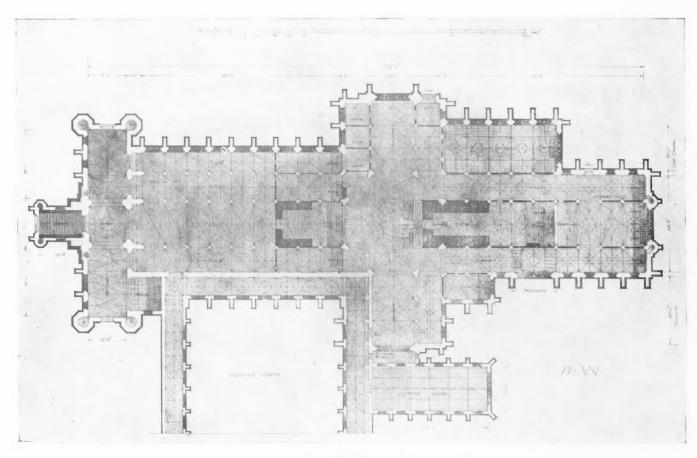
The Lady Chapel is situated in a position north of the choir, as at Ely, but is attached to the aisle and divided from it only by a stone screen.

Instead of the orthodox octagonal Chapter House, precedent found at Bristol and Oxford has been employed, and a rectangular form adopted. This and the west porch, which has a large parvise, are roofed in timber. Vaulting is used everywhere else.

The vaulting of the nave and aisles is of the quadripartite form. The sexapartite form has been suggested for the transepts. The main transept vaulting is based on that of Tewkesbury nave and Gloucester choir, and that in the choir, which would be very ornate, was worked out from the vaulting of Norwich nave and Ely choir. The Lady Chapel would have a specially individual vault, the principles proposed for its construction being those of the Oxford Divinity School vault and of the choir at St. Frideswide's, but fan-vaulting would be substituted for the lierne form.

The fittings have been arranged in the manner typical of the fifteenth-century monastic churches. A wood screen divides the clergy from the laity, and, west of the crossing, the rood screen, with loft, extends across the full width of the church. Altars are here provided, and elaborately coloured reredoses and super-reredoses have been suggested for the lay altar and that in the north wall aisle. The rood beam with figures, and the whole of this screen and loft, would be coloured after the manner of Attleborough, Bramfield, Ranworth, etc. The pulpitum carrying the organ is placed under the crossing, into which the choir partly extends. The canopies to the stalls are indicated after the types at Ripon, Manchester, and Beverley, which have a niche to the upper stage. The pinnacles, however, would here be much exaggerated. Stone screens are shown in this part of the cathedral.

Although the sources of suggestion are mediæval buildings of widely different locality, this cathedral would religiously maintain the local traditions and character of the district in which it were erected.



A STUDY IN CATHEDRAL DESIGN: PLAN.

By Thomas Rayson, A.R.I.B.A.

THE PROTECTION AND PRESERVATION OF ANCIENT BUILDINGS.

In spite of the restrictions which the War has imposed upon the work of the Society for the Protection of Ancient Buildings, the Committee has contrived to make its fortieth annual report, just issued, a document of considerable architectural interest. The record of work accomplished is necessarily of small proportions. Works of "restoration," it is recalled in the introduction, have been everywhere postponed; and even where action has been necessary for the preservation of an ancient building, only the most urgent repairs have been possible. Physical inactivity, however, has acted, if at all, as a mental stimulus; and the Society has more than maintained its customary vigilance in the defence

with the exception of the western wing, which is tenanted by a farmer.

The building is a unique architectural specimen of the middle period of the sixteenth century; the ground plan roughly corresponds with the "H" type. The beauty of its outline, rich in octagonal pinnacles and fine chimneys, forms a striking contrast with its surroundings. The fabric is sound: the red brick of which it is built has withstood the ravages of time and has weathered remarkably well; indeed, externally it looks very much as it did in the early years of Queen Elizabeth's reign. The interior has been mostly stripped of its fittings years ago, and presents a sad picture of



EASTBURY HALL, BARKING, ESSEX.

From a Drawing by Hanslip Fletcher.

Reproduced by courtesy of the Society for the Protection of Ancient Buildings.

of threatened buildings. In all, seventy-eight buildings received the attention of the Society during the year ended I June 1917. Many famous structures are included in the list; and we may feel satisfied that no effort will be spared to ensure their preservation.

By the courtesy of the Society we are able to reproduce a selection from the admirable illustrations which accompany the report, together with a few words of description and comment.

EASTBURY HALL, BARKING, ESSEX.

The manor of Eastbury formerly belonged to the Benedictine Abbey of Barking; in 1557 it passed into the hands of private owners, and from 1734 the glory of the manor-house has steadily declined, until to-day it has fallen into disuse

neglect. Horses and poultry are housed in the parlours and the dining-room, which in bygone days were resplendent with decorated ceilings and stone fireplaces, painted frescoes and tapestries.

The existence of this building has been insecure for two centuries or more, but its threatened demolition has never been more real than it is at the present moment. Its degradation may be consummated and it may be handed over to the house-breaker. The timber it still contains may seal its doom unless effectual measures are taken to ensure its preservation. The Society has made urgent representations to the borough council, but without Parliamentary sanction it is impossible to protect the building for all time unless some individual or body of persons would purchase it with that intent. The sugges-

tion has been made that it should be converted into a home for disabled soldiers, for which it is eminently fitted; and surely this late Tudor manor-house would have a particular charm for those men who have fought and suffered for their country.

ABBOT'S BARN, PILTON, SOMERSET.

This old barn formerly belonged to the Abbots of Glastonbury, whose summer palace—now called the Manor House—is close by.

The interior exhibits an interesting construction of oak, and the roof is covered partly with thatch and partly with stone tiles. The thatch had fallen into such bad repair that the owner contemplated replacing it with blue slates, which would have robbed the building of one of its most characteristic features. Fortunately, local feeling was aroused, and owing to the energy and public spirit of a resident the building

it is satisfactory to be able to read that the citizens of St. Albans have awakened to its interest, and that already a movement is on foot to preserve it.

Judging from old maps and other data, the building was erected late in the sixteenth century; it underwent considerable alteration in the reign of Charles II; the brick front of seven bays, two storeys high, replaced the overhanging timber front, and the hall, which formed the principal apartment, was divided in two. Fortunately the new work was inserted without displacing existing features. The original fireplace with its Tudor Rose decoration was left standing, and the moulded oak beams with the trellis panelling in the ceiling remained in situ. Reference to the accompanying plan will make this clear. The alterations of the seventeenth century included the adaptation of the existing roof timbers and the insertion of three dormer windows, two with straight-sided pediments, the centre one having a segmental pediment, which



Photo: Messrs, J. H. Day and Sons.

TITHE BARN, PILTON, SOMERSET.

Reproduced by courtesy of the Society for the Protection of Ancient Buildings.

was at the eleventh hour rescued from this fate. Although the slates were already on the site, arrangements were made for reed to be substituted; and in spite of the severe winter, as well as the War, a competent thatcher has made steady progress with the work, which is now nearing completion.

As the result of this careful treatment, this valuable and venerable building has been preserved without loss of interest, and will remain one of the treasures of the county for many years.

No. 1 St. Peter Street, St. Albans, Herts.

Mr. Thackeray Turner's letter to "The Times" has recently drawn attention to the house No. 1 St. Peter Street, called The Mansion, which is among the finest survivals of sixteenth-century architecture in the city. For three hundred years this house has been associated with civic affairs, and

was taken down and replaced by a straight-sided one thirty years ago.

All the work is in good preservation, and if the projected act of vandalism can be stopped and the panelling saved for the city the building might well become a public museum. A small committee is to be formed locally to discuss a proposition on these lines, and, if necessary, to invite subscriptions.

At any time, the destruction of houses of historical interest is deplorable; but in these days of national stress, and with the example before us of spoliation in the areas devastated by war, these heirlooms of the past within our doors must be guarded with zealous care.

Readers of The Architectural Review will remember Mr. Hanslip Fletcher's large pen-and-ink drawing of this interesting old house which formed the frontispiece to the August issue.

As the introduction to the Society's report contains matter of considerable topical interest, we quote it somewhat freely:—

"The introduction to the previous issue," it is stated, "drew attention to the risk of disfiguring ancient buildings and their amenities, and more especially churches, by the erection of unsuitable memorials. It is too often the case that such memorials, though unobjectionable and even praiseworthy in themselves, have been designed without any consideration of the building in which they are to be placed. It is evident that such a warning needs restatement, for the past year has revealed yet another danger.

"There is a growing desire for adding war memorial chapels or other structures to cathedrals and churches. These projects are intended to commemorate the sacrifices made by the country, town, and village, and are often promoted with the additional object of enlarging the edifice concerned. Schemes of this nature almost invariably involve the alteration or

destruction of some ancient workmanship, a procedure to be deplored when, as frequently happens, the extension has little reference to the real needs of the church.

"A typical instance is the proposal to restore the missing Norman chapel at the east end of Norwich Cathedral which was removed in the thirteenth century to give place to a new Lady Chapel. This later structure in turn was demolished in the sixteenth century, and the site has remained practically vacant since that time. It is doubtful if in ordinary times such a building as is now proposed would be seriously contemplated. The idea of replacing the earlier missing chapel, the foundations of which are known to exist, as a War memorial, however, encourages the authorities to proceed, and the site, shape, and character having been chosen, instructions are given to a qualified architect to plan a Norman chapel.

"The plan at present favoured by the Dean and Chapter, while confusing the structural story of the cathedral, appears unsuited to its dual purpose. It will not adapt itself to any purpose of worship other than what is already provided, nor will it at the same time lend itself to the best means of commemorating the names of Norfolk men and the deeds which they have rendered in the great struggle.

"Other less important cases could be given where a more general acceptance of the proposals would have been secured had competent advice been taken in the initial stages. The ancient ecclesiastical buildings of this country are a national possession protected by ecclesiastical law from risk of defacement, destruction, or undesirable decoration, and are placed in the hands of incumbents or other temporary authority to be cared for. The purpose of a faculty is not always understood or observed by these responsible guardians, and it is often found that changes are effected to the detriment of these priceless buildings when, by the ordinary operation of the law, all risk of injury would have been avoided. It is seemly that the church should not display signs of internal troubles, but in the matter of its great places of worship a strict observance of ecclesiastical law and authoritative custom should be upheld."



NO. 1 ST. PETER STREET, ST. ALBANS, HERTS.

From an Etching by Hanslip Fletcher.

Reproduced by courtesy of the Society for the Protection of Ancient Buildings.

VARD

STORE

STORE

PARAMER

PRANCE

FRANCE

RAUMSS.

GROVND PLAN

Scale OF FEET.

BLACK SHEWS 16TH CENTURY WORK

HATCHED WORK SHEWS 17 MCENTURY ALTERATIONS

Reproduced by courtesy of the Society for the Protection of
Ancient Buildings.

"THE WORKING-CLASS HOUSING PROBLEM AND ITS SOLUTION."

To the Editor of THE ARCHITECTURAL REVIEW. SIR.

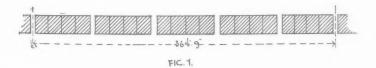
The very interesting article by Mr. Mervyn Macartney gives rise to so many ideas that it is not easy to express them in a reasonable space. If the notes which follow appear to criticize some of the points mentioned in the article, it is because it is convenient to deal with them as they appear.

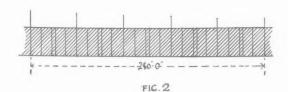
The difficulties with which most of us have to contend are found in urban, or rather suburban, housing, and the only plan illustrated which can be considered as belonging to this type is the standard plan on page 79. The others come under the head of rural cottages, or are designed for special positions. Reference is made to the appalling streets of some of the suburbs of London and other large cities. It is this state of things which needs alteration, but how is it to be done?

Mr. Macartney does not discuss sites; but is not this the crux of the whole matter? Assuming that cottage plans are limited to several types—and it is reasonable to suppose that the limit of the number of combinations of three bedrooms on the upper floor and of living-room and scullery on the lower floor is soon reached—the architect is in a very helpless position if the plots have not been considered with a due regard to the grouping of the houses in a convenient and pleasing manner. Surely this is essentially a matter for an architect. Unfortunately, however, he has often no opportunity of doing this. In many estates the frontages are practically fixed so as to obtain as many ground rents as possible, and this, together with the great cost of street and sewer making, renders it almost hopeless to depart from the stereotyped plan. The frontages must be kept as small as possible.

In this city it has been usual to divide the estates into plots of 56 ft. frontage for four houses, with one through passage leading to a common yard. This gives rooms just over 12 ft. between the dividing walls, and, of course, the front door opens directly into the front room. It is hardly ever used, by the way, except for bearing the number of the house. The stairs are placed between the front and the back rooms, and a scullery may or may not project as a back addition. The through passage is 3 ft. 6 in. wide, and the bedrooms extend over it. The terraces are continued without a break until the cross streets are reached. The general effect of miles of these streets is as depressing as can well be imagined.

The standard plan illustrated in the article is, with very slight variations, the one evolved by many architects, and has





as small a frontage as is possible in a good plan. It is noticeable, however, that the conveniences are not included in the main building, and these are never sightly in separate blocks. But even this plan, although the actual cost of the buildings may not exceed that with an inferior plan, is almost impracticable as a remunerative investment under ordinary circumstances—for the following reasons. Assuming there are twenty cottages in five blocks of four each, with 6 ft. between the blocks, the frontage would work out as follows:—

(:	See F1	G. I.)				
					Ft.	in.
Four houses at 16 ft. between walls						0
Five walls at 9 in	***		***	***	3	9
	E	ach bl	lock		67	9
67 ft. 9 in. by 5			***		338	9
Four spaces at 6 ft					24	0
Two half-spaces at 3 ft.		***	***		6	0
			Total		368	9

On the other hand twenty cottages in one terrace with one through passage to each would give this result:—

	(;	See FIG.	. 2.)				
r							in.
Four houses at 12 ft. 21 in. between walls						48	9
Four walls and ty	Four walls and two half-walls						9
One passage			***			3	6
		Each	block			56	0
Five blocks at 56	ft	***		***		280	0

As the cost of street dedication and ground rent would be one third more in the former than in the latter case, it is easy to see why such a plan, however good, does not find favour with those building for an investment, let alone with speculating builders.

The idea of using local materials is a very good one in the country, but it is hardly practicable in towns. In the innumerable working-class streets of our cities it is not possible to consider the general use of stone. In this city of steep gradients and costly carting, stone is largely used in the immediate proximity of the quarries which exist on one side; but on the sides where there are no quarries stone is not used. In the stone suburbs it is used only for fronts, brick being used for the backs. For foundation walls rubble stone is cheaper than brick, and is used freely. To mix stone and brick externally is a shabby way of dealing with the problem, and is entirely destructive of any sentiment in favour of buildings appearing to "grow out of the soil." Besides, at any time a brickyard may be started close to the quarries, and what has been a stone district becomes a brick one. Stone is wasteful of space; there will probably be many open joints in the interior of the wall, and the mortar is likely to drop out. Rough stone, too, catches the dirt and smoke more than smooth brick.

Of course, for buildings of other kinds nothing is more delightful than stone, but it is hardly suitable for street after street of cottages in a smoky atmosphere. Some of the West Riding towns—where stone is actually cheaper than brick, and is in consequence used almost exclusively—equal in ugliness any that can be seen in brick districts.

Mr. Macartney disclaims any intention of showing "pretty" houses, but there is not one in his article that is not attractive in every way—far more so than the fussy erections with which we are familiar.

It is doubtful whether a single coat of plaster can ever be satisfactory. Walls are usually so uneven that quite an inch of plaster is necessary in places to obtain a flat surface. With rubble stone it is often nearly two inches thick in places. To use a plaster which would give an even surface in one thick coat would be more expensive than to use a coat of rough mortar with a setting coat which would take paper or distemper.

If the problem of suburban housing is difficult, what can be said of the districts between the business centre of the city and the suburbs? These are the districts in which are found the "condemned areas" occupied by the most miserable section of the population, and these are the despair of the housing reformer. In Continental cities, as in the West End of London, these intermediate districts are often the most attractive. They are occupied by the wealthiest of the inhabitants who do not wish to get as far away as they can from the centre, as is the case in our provincial cities. In removing slum property it is obvious that the two-storied suburban cottage cannot be erected in these districts. It is better to deal with this problem more on the lines of the Westminster housing scheme by providing flats with good open spaces, and playing-greens with fountains and ornamental gardens and courts. These are much more interesting than streets of two-storied cottages, and if provided in our provincial cities should attract a large class of the population who wish to be near the centre.

Possibly these notes emphasize the difficulties rather than suggest a solution of the housing problem. Is not the question in the main an economic one?

H. L. PATERSON, A.R.I.B.A.

Cairns Chambers, 19 St. James's Street, Sheffield.

To the Editor of The Architectural Review. Sir,

I was pleased to see in your October number that you are opening your columns to what one might call a conference in print on the above important subject. I was much interested in Mr. Macartney's remarks as to the living-room stove, for I also must confess to be a worshipper of the British open fire.

I have been the means in several cases of having fixed a stove which meets the case, and I enclose two small sketches which will explain to a certain extent the working of it. In the one case, I fixed it in an old cottage fireplace in the north of Scotland; the other represents new work.

In the former, I admit the old stonework adds to the effect, but it could be equally well placed in the regulation opening, with cement jambs and head. It will be seen that it is not a substitute, but a proper open fire. The oven is over the fire behind what appears to be a blower, and the sloping back when let down forms a hot plate as in a range. The arrangement cooks well, and this I have on the very best authority, namely, the housewives', while the head of the family must certainly be pleased with the open fire in the evenings. In the type of house we are considering, the bath, if there is one (and there certainly ought to be), is generally in the scullery adjoining the living-room. Now, a boiler can be supplied with the stove, so that, by fixing a small tank in the scullery, hot water can be had for the bath, without the trouble of carrying it after it has been heated.

John Stuart Mill has put it that the object of all true practical economy is the greatest amount of happiness for the greatest possible number; and in making the home comfortable we are taking a step towards the realization of this high ideal.

GEO. McLEAN FORD, F.R.I.B.A.

Bank Chambers, 329 High Holborn, W.C.

MR. MACARTNEY REPLIES.

Replying to correspondents whose letters appeared in our last issue, Mr. Macartney writes:—

"It is impossible for me to go into detail in criticizing the correspondence evoked by my article; but I should like to reply to various objections contained in some of the letters. Mr. Hallam asks why should a tenant pay for an empty space in a roof? Does he mean that flat roofs are more economic than steep roofs? My experience of them is that unless made with care they are very costly to construct; and they are entirely out of keeping with the building tradition of this country, and,

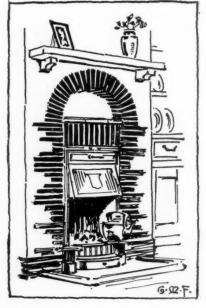
in rural districts, with the character of

their surroundings.

"The selection of site and placing of the buildings on it is so much a matter of locality that it is impossible to discuss the problem in a short article. There are certain definite rules accepted by all who have studied the subject, such as, place the living-room to get all the sun possible, let the ground fall away from the houses, do not place more than eight dwellings (separate) to the acre, etc.

"I am afraid Mr. Bromley's plan would not appeal to the T.P. and R.H. Council. All back additions are anathema to the modern cottage designer. If Mr. Bromley could plan his scullery annex dos à dos on the party wall he would obtain a longer open space between one projection and that of the next house. Mr. Bromley's remarks as to access to back areas of dwellings are borne out by troubles, etc., at Well Hall. There is no nation so tenacious





THE LIVING-ROOM STOVE.
From Sketches by Geo. McLean Ford, F.R.I.B.A.

of its insularity as the English. It has taken half a century to bring flats into any sort of favour, and that only with 'people of means.' The labouring and working class do not take to them kindly. They want private access to their houses and gardens, and do not intend to share doors, gates, paths, or staircase with anyone.

"As to Mr. Burgess's carefully thought-out review of my article, I must in the first place thank him for the pains he has taken to form an impartial judgment on the plans, etc. He has studied the problem from the overseas standpoint, which is always interesting but not always practical (a sentence or two back I spoke of the English insularity), and the particular stratum of society that these buildings are planned for dislikes novelties. Baths, hot-water pipes, and sanitary conveniences can only be introduced with great care, as very often the tenant, instead of utilizing them for the purposes they were meant for, destroys them. We must educate people to the idea of these things if they are to be properly used. The cost of upkeep is enormously increased by every additional article that is introduced into the building. A circulating hot-water system would be both costly to install and difficult to keep in order, especially in villages where there is no constant supply of water.

Mr. Burgess's suggestion of a cupboard-dresser partition seems to me capable of much utility. But I do not believe in the veranda on the north side of a cottage. It would become the receptacle of all the rubbish that collects in a house, and possibly be turned into a fowl-run or even a pigsty. The warming of rooms by running a flue-pipe through them and using a portable stove is excellent if it can be carried out; but the scheme would be a novelty to most cottagers, and not likely to catch on rapidly. I can fully bear out Mr. Burgess's recommendation of frame houses. I lived nearly a year in such buildings, and found them very comfortable, even with temperature below zero.

"Mr. Keith Young's communication is the one that seems to me most illuminating and practical. I am glad indeed to get the sanction of an expert as to the unnecessary heights insisted on by local authorities in some districts. This is a matter that will certainly be seen into by the Local Government Board. The patent brick I referred to was one made by Colliers, of Reading. It is about 4 in. thick and is stated to be waterproof. I heard good reports of it, and had specified its use just when the War broke out."

R.I.B.A. NATIONAL HOUSING COMPETITION.

'HE Local Government Board, being desirous of obtaining designs for cottages suitable for the housing of the working classes, have placed at the disposal of the Royal Institute of British Architects a sum of money for this purpose, and the Institute has therefore decided to invite its Allied Societies to assist in obtaining designs under the following conditions:-

For the purpose of the competition, the country is divided into six areas, comprising the districts of the Allied Societies and the R.I.B.A., as follows:-

I. Northern Area.—Northern Architectural Association, Leeds and West Yorkshire Architectural Society, York and East Yorkshire Architectural Society, Sheffield South Yorkshire and District Society of Architects and

II. Manchester and Liverpool Area. - Manchester Society of Architects, Liverpool Architectural Society.

III. Midland Area. - Birmingham Architectural Association, Nottingham and Derby Architectural Society, Leicester and Leicestershire Society of Architects, Northamptonshire Association of Architects.

IV. South Wales Area. - South Wales Institute of Architects.

V. South-West Area. - Devon and Exeter Architectural Society, Bristol Society of Architects, Hampshire and Isle of Wight Association of Architects. VI. Home Counties Area.-Royal Institute of British Architects.

CONDITIONS.

VI. Home Counties Area.

1. Pursuant to the scheme above described, the Royal Institute of British

Architects invite designs for cottages in accordance with the instructions and particulars stated below. The competition is open to any British subject.

2. The designs are to be suitable for erection in urban and rural districts in the counties of Norfolk, Suffolk, Cambridge, Huntingdon, Middlesex, Essex, Hertfordshire, Bedfordshire, Oxfordshire, Buckinghamshire, Berkshire, Surrey, Sussex, and Kent.

The designs are to include four classes or types of cottages as described below, and premiums are offered as follows:-

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					Ist.	2nd.
Class	A	***		***	£100	250
7.9	В	***		***	100	50
22	C			***	100	50
	1)				50	20

4. The adjudication will be made by a committee of not less than three architects appointed by the Royal Institute of British Architects, and their

architects appointed by the Royal Institute of British Architects, and their judgment is to be accepted as final.

5. It is to be understood by competitors that the payment of the premiums conveys the absolute possession of the designs, including all copyright or other rights, and that the promoters will be at liberty to make any use whatever of the designs, and to publish them with the names and addresses of the authors. The promoters reserve the right to exhibit publicly, after the award, all or any of the designs as they may think best, with the names of the authors attached. No architect shall compete in more than one area.

6. Designs are to be prepared strictly in accordance with the instructions below, and any design which does not so conform will be excluded, point the Committee of Selection are to be the sole judges.

7. Designs are to be delivered carriage paid to the Secretary, R.I.B.A., 9 Conduit Street, Regent Street, London, W.I., on or before 31 January 1918. 8. The unsuccessful designs will be returned to the authors carriage paid as soon as practicable.

as soon as practicable.

9. Any questions had to be addressed to the Secretary of the Royal Institute of British Architects, 9 Conduit Street, W. I, on or before 27 November. Replies will be issued to all competitors as early as possible.

10. Each set of designs is to be accompanied by a sealed envelope containing the name and address of the author.

11. No motto or distinguishing mark is to be put on the drawings.

12. Every care will be taken of the drawings, but the promoters will not be responsible for any damage they may sustain, or for their loss.

13. Designs may be submitted in any or all of the classes as follows:—
Class A.—Living-room, scullery, etc., and three bedrooms.

13. Designs may be submitted in any or all of the classes as follows:—Class A.—Living-room, scullery, etc., and three bedrooms.
Class P.—Living-room, parlour, scullery, etc., and three bedrooms.
Class C.—Living-room, parlour, scullery, etc., and two bedrooms.
All the above to be treated as two stories.
Class D.—Variations of either A, B, and C planned entirely or mainly

one floor. Larder, fuel store, etc., w.c. or e.c., cupboards, etc., to be

14. In all cases back additions are to be avoided or minimized as much as possible.

15, Ail houses are to be provided with a fixed bath and a cold-water supply. Arrangements for the supply of hot water are to be indicated on

the plan.

16. Positions of all principal pieces of furniture, such as dressers, tables, beds, etc., together with opening of doors, the points of the compass, and dimensions of rooms, are to be indicated on the plan.

17. In Classes A, B, and C several houses must be shown as a block of which three are to be planned in detail, the others in outline only. Of these three, one is to be an end or semi-detached house; another a terrace house or one between party walls with narrow frontage (not exceeding 18 ft.),

and a third with wide frontage. The depth of the site is left to the discretion of the competitors, and the site may be regarded as level.

18. The general height of rooms is to be not less than 8 ft., the floor area of the principal bedroom to be not less than 160 ft., and no bedroom to be

19. The plans may be prepared without regard to any existing by-laws or local Act provisions, the object being to show the best types possible if existing restrictions are removed.

20. Each design is to show plans of each floor, one section indicating the staircase, and two elevations, and to be drawn to a scale of one-eighth of an inch to the foot on half double-elephant sheets. No other drawings to

21. All drawings are to be in line only without washes, with the walls

21. All drawings are to be in line only without washes, with the walls blacked in, and are to be sent flat.

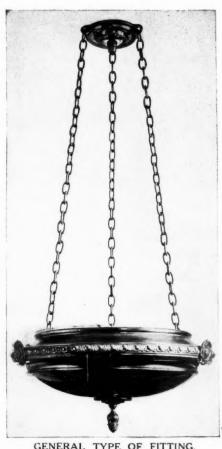
22. The designs in each of the Classes A, B, C, and D are to be on separate sheets. Notes of materials, etc., are to be printed on the drawings, together with the cubic contents of each house measured from one foot below the floor to half-way up the rcof. No separate report is necessary.

23. Wherever possible, materials of the locality, if reasonably obtainable, should be specified; but, as there exists at the present time a serious shortage of certain materials, competitors are invited to consider and suggest the substitution of others with a view to facilitating and cheapening construction. It is essential that strict economy be exercised throughout the design, and this will be an important consideration in making the awards.

A MODERN LIGHTING INSTALLATION.

N the past, architects have not perhaps been fully alive to the high importance of artificial illumination in buildings; but recent years have witnessed a gradual but definite change of policy with regard to this vital department of building equipment. It is certainly no exaggeration to say that artificial lighting is now receiving closer and more careful attention than ever before. A notable instance of modern practice is provided by the new premises for the Crown Agents for the Colonies, illustrated in our last issue (Messrs. John W. Simpson, F.R.I.B.A., and Flight - Lieutenant Maxwell Ayrton, R.N., A.R.I.B.A., architects).

These buildings were partly completed before the War, and the lighting arrangements were very carefully considered before the equipment was selected. An extensive series of tests, running over a period of six months, was made with all forms of lighting systems-direct, semi-indirect, and indirect—with various types of equipment; and, as a result, indirect lighting with half-watt type



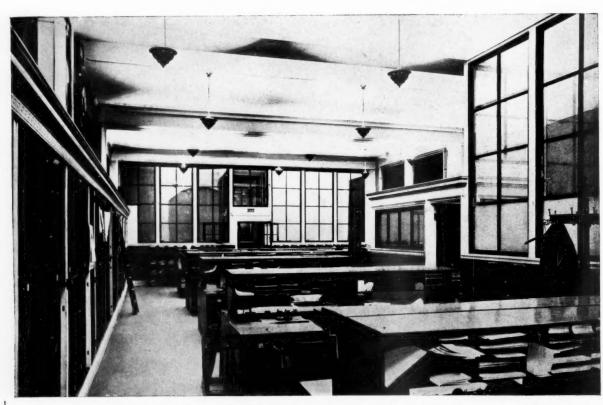
GENERAL TYPE OF FITTING.

lamps was selected, and a trial equipment of the B.T.H. "Eye-rest" system was installed.

A thorough test was given to it under practical conditions of office work, and subsequently this type of equipment was specified and ordered for the lighting of the whole premises. When the additional buildings of the group belonging to the department were completed a year or so later, the same system with half-watt type lamps was installed throughout.

The accompanying illustrations are reproduced from untouched photographs. The upper one shows the general type of fitting adopted throughout the buildings, while the lower, an office interior, shows the excellence of the lighting effect secured. It was taken by the actual light of the fittings installed.

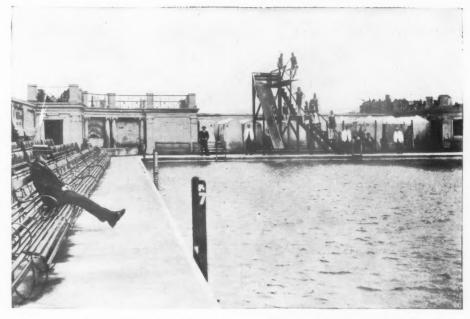
The intensity of the light on the working surface is fully as strong as that which would be obtained from unscreened light sources; but the indirect principle ensures the elimination of all offensive glare and objectionable shadows.



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The Editor will be pleased to give his careful consideration to any articles, photographs, or drawings which may be sent with a view to publication, and the utmost care will be taken of them; but the Editor cannot hold himself responsible for any loss or damage except in the case of material which has been accepted or specially commissioned.

All articles and illustrations should bear the name and address of the sender, and postage should be sent to cover their return if submitted in the ordinary way.

The Editor disclaims responsibility for statements made or opinions expressed in any article to which the author's name is appended; the responsibility for such statements or opinions resting with the author.

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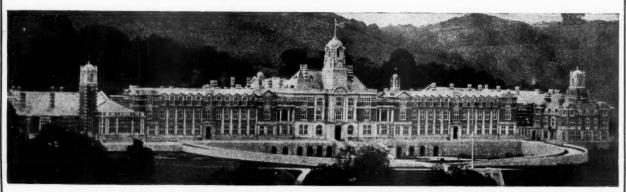
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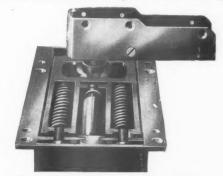
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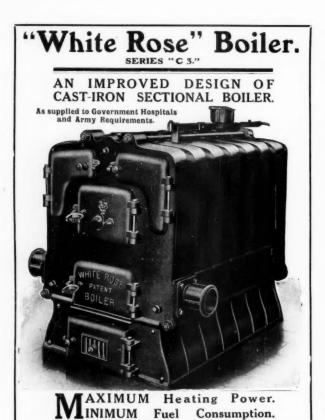


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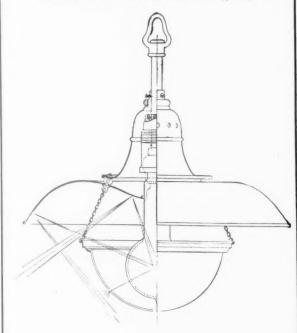


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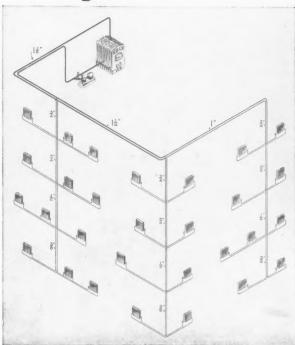
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NOTES OF THE MONTH.

Some Notes on Chequers Court.

Concerning the changes that have been wrought from time to time at Chequers Court, recently given to the nation as a permanent country residence for the Prime Ministers of England, Sir Arthur Lee has written to the Press the following generous tribute to his predecessors in the occupancy, and to those by whom he has been assisted in careful restorations: "So much has been written about Chequers and the architectural vicissitudes through which it has passed in the course of the last hundred years, that I fear less than justice has been done to my predecessors there. The gothicizing of the exterior and interior of the house, which took place in late Georgian times, has been rightly condemned on both archæological and architectural grounds; but it was universally admired at the time, and was, I am convinced, carried out with the most reverent and pious intentions. Nearly a century later the task of purifying William Hawtrey's house of these disfiguring accretions was commenced by Mrs. Frankland-Russell-Astley and her son, the exterior stucco was removed, and a careful restoration was contemplated and commenced under the skilled direction of Mr. Reginald Blomfield, R.A. For various reasons this project had to lapse until it became my privilege to carry it through, on a more complete scale, in 1909 and succeeding years. With the full approval of the late owners, I again called in Mr. Blomfield to advise on all architectural matters, whilst the laying out of the gardens was undertaken by Mr. H. Avray Tipping. To these two distinguished authorities the credit for the recovery by Chequers of its Elizabethan character and environment is primarily due. I am anxious to make these facts known, as some of the published comments have, I fear, been calculated to wound the feelings of some of those who still live, and who loved and cared for the house in the past."

The Lincoln Statues.

In the House of Commons recently, Sir A. Mond (First Commissioner of Works), replying to Mr. Butcher, said it had not been the custom in the past for the First Commissioner of Works to enter into formal consultation with any body of experts as to the artistic merits of any one statue to be erected on Crown property, nor did he know how any such body could effectively consider the wide divergence of views which existed in all matters of art. "I now understand," said the First Commissioner, "that the American Committee for the celebration of one hundred years of peace are anxious to send a replica of the statue of President Lincoln recently erected at Cincinnati and executed by Mr. George Gray Barnard, a sculptor of the highest standing, which they consider to be a superior monument to St. Gaudens's statue, and I do not consider that I should interfere with the selection made by the donors, who, I understand, comprise men of well-known artistic standing." Mr. Butcher: "Has the right hon, gentleman had an opportunity of seeing either of these statues, or has he got any report upon their artistic or other merits?" Sir A. Mond: "I have seen reproductions of the statues, but I have not had an opportunity of seeing the statues themselves. I have had various accounts of their merits, and opinions differ, some preferring one and some the other." Mr. King suggested that an opportunity should be given to the House of Commons, and to recognized authorities on civic art, to make suggestions before any statue offered by any private persons was accepted for erection in London. Sir Alfred Mond

replied that he did not consider that this suggestion was at all practical. In the name of common sense, why not? Quite obviously this is the only practical and businesslike course to take. It is consulting the persons who know, and is every whit as practical as consulting a doctor or a lawyer on their respective subjects of special knowledge. It cannot be supposed that, since the remote days of Mr. Acton Smee Ayrton, any First Commissioner would, with self-sufficient complacency, dispense with competent advice on such matters. Doubtless, Sir A. Mond has consulted expert opinion in this matter of the statues. If he has not, the neglect of so elementary a precaution is inexcusable; if he has, then there is no sufficient reason for refusing to extend the principle. In any case, it is distinctly unfortunate that this controversy should have arisen. The best way out of the difficulty is to prevail upon our American cousins to send us both statues: though upon us would then devolve the somewhat invidious duty of deciding which should have pride of place in Parliament Square.

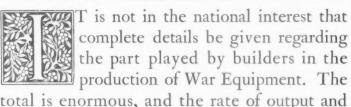
Architects and Air Raids.

Mr. Sydney Perks, Surveyor to the Corporation of the City of London, has sent the following letter to the editor of the R.I.B.A. Journal: "Sir,-At a meeting at the Mansion House it was decided that the occupiers of certain buildings in the City should be asked to exhibit notices stating that the public could take refuge there. It was necessary to make a survey of the whole City as quickly as possible, and I should like to acknowledge in our Journal the prompt and valuable assistance so kindly given by Messrs. Aickman, Max Clarke, Cross, Davidge, Gosling, Goldsmith, Hornblower, Lanchester, Marks, Martin Saunders, Shepherd, Stevens, Surrey, Lewis Solomon, Stenning, Tubbs, and Wigglesworth. Yours obediently, Sydney Perks, City Surveyor." The excellent example set by the City Corporation might well be followed by other municipal authorities whose towns are at all likely to be attacked. It is a matter in which architects and surveyors are the persons best qualified to render effective service, whether they act upon intimate local knowledge, or whether they depend upon the instant judgment possible only to the trained eye; which things, being perfectly obvious, are therefore the more likely to be overlooked. To overlook the architect is, indeed, an inveterate national custom, and we are glad to record this gratifying instance to the contrary.

A Famous Seventeenth-century Bedstead.

A famous state bedstead from Boughton House, Northamptonshire, recently presented to the Victoria and Albert Museum by the Duke of Buccleuch, has been placed on exhibition in the Woodwork Galleries of the Museum (Room 54). The bedstead, with hangings and upholstery of crimson Italian brocade enriched with gold fringes and ostrich plumes, is a typical example of the magnificent bedsteads which were made in England for royal palaces and noblemen's houses in the latter part of the seventeenth century. Boughton House was rebuilt during that period by Ralph, Duke of Montagu, who was ambassador to the court of France at the time of Louis XIV. The decoration and furnishing of the House were completed by 1694, when William III and his court visited Boughton, and it was for this occasion that the bedstead is said to have been made.

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NOTES OF THE MONTH.

A Note on London Statues.

In a topical discourse under "Here and There," in a recent issue of "The Architects' and Builders' Journal," "Diogenes" says: "We all hope that ere long he (Canning) will have, in his little oasis of verdure in Westminster, as a companion of his statuesque solitude, St. Gaudens's statue of Abraham Lincoln. They will enjoy each other's society; for both hated tyranny and loved a joke, and both were kindly natured men. Year after year I have noticed that the sparrows have made a nest under Canning's right arm, and I was glad to see that it was not disturbed. I can fancy that Canning's shade enjoys the sight. With their passion for tidiness, and with that craze for cleanliness which Mr. Will Crooks once said was the most depressing attribute of workhouses, the Dutch would have ruthlessly swept the nest away, and the act would have been as sinful as the refusal of hospitality to the birds who would build in the stackpipes on churches. Seeing those wirework cages designed to keep out birds, the gentle St. Francis would achieve his nearest approach to a frown, unless he chanced to reflect that his feathered friends were really being protected from the 'billowy grave' that ended the career of the hero of 'Titwillow.' Not but what an occasional cleansing of our statues (which seems to be nobody's business in London) would be beneficial. Sir Henry Irving's delicate lineaments, in the Charing Cross statue, are encased in a mask of soot, as if he had newly made up for Othello: 'Haply for I am black--' More than that: the statue rather illustrates an observation I once heard the late Canon Barnett make about the excessive thoroughness of a certain lady: 'If she were going to play Othello, she would blacken herself all over.'

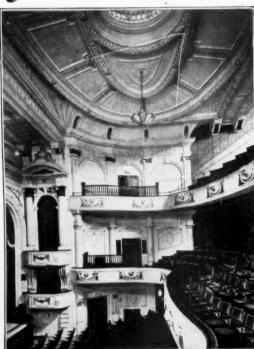
Although the Charing Cross statue of Irving is, on the whole, rather fortunate in its site-it is in the heart of Theatreland, and the statue has a comprehensive view of the booksellers' shops the scholarly actor loved to haunt in his hours of leisure, going into them with the intention of spending five pounds and coming away with a receipt for fifty-it is not well lighted, and that may partly account for the negroid appearance which is so flagrant a contradiction of Irving's habitual pallor. But I, for one, hope that it will never be removed, unless Time, the great scene-shifter, removes the booksellers and the theatres from Charing Cross. Statues are notoriously peripatetic; but it were pity to see the great tragedian resume his earlier character of 'walking gentleman.' It is odd that the district should hold one of the best of the several statues of Irving, and (in Leicester Square) the worst possible statue of Shakespeare. But if statues are put up in the reasonable expectation that sooner or later they will be removed elsewhere, why not provide them with chariot wheels-or at least castors!"

National Housing Scheme: Government Intentions.

The Government has decided that the new national housing scheme shall be controlled and directed by the Local Government Board. The returns and reports already received from the city, borough, town, and district councils throughout the country show that about 100,000 new workmen's dwellings are urgently required, but it can be stated that from 150,000 to 200,000 will be erected to meet the after-war conditions. It has been intimated at the Local Government Board that the Government will be asked to make a grant of a subsidy of several million pounds for the erection of the houses, but this subsidy will be purely a temporary measure to meet the

[Continued on page xxii

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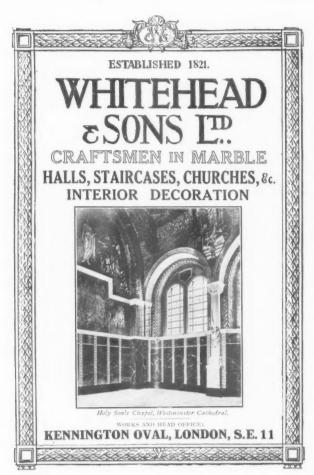
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NOTES OF THE MONTH.

abnormal conditions that will prevail after the War. The type and size of the houses will vary according to the district in which they are built; but all the parts will be standardized, from the bricks to window fittings. In every possible case gardens will be provided for the purpose of food cultivation, and the Local Government Board will encourage the local authorities to purchase land for this purpose, it being realized that the working-man's garden will be of national value in the years of world-shortage of food following the war.

Architectural Association Bureau and Drawing Office.

Mr. F. R. Yerbury, Secretary of the Architectural Association, writes as follows: "Some time ago you were good enough to give publicity in your columns to the Association's scheme for assisting members of the architectural profession on their discharge from the army. One of the proposals outlined was the establishment of a drawing office, in which men upon their discharge would find employment until such time as they could obtain permanent work, and in which an opportunity would be afforded to those not physically fit to take up employment elsewhere, of working under circumstances specially arranged to meet their requirements. I am now writing to inform you that the drawing office is established, and whilst fully aware that work in the architectural profession is scarce at the present time, I shall be very grateful to any architect who can send work to the office to be done. Any type of drawing can be undertaken, and assistants can be sent out to architects' offices for temporary work. I am sure

the office will commend itself to the profession, and its existence has only to be known to ensure its receiving sufficient support to make it a success. I would also draw attention to the fact that the Architectural Association Bureau is most anxious to help any member of the profession, being discharged from the army, in matters connected with his return to civil life, and that special arrangements are being made in the schools to re-train and assist those whose military service has rendered this necessary."

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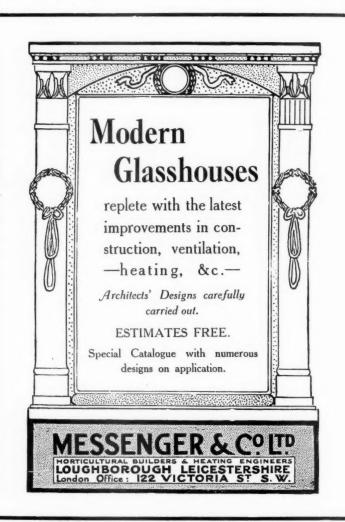
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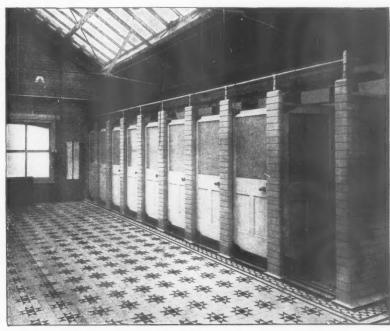
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Rt. Hon. LORD GEORGE HAMILTON, P.C., G.C.S.I.

Total Funds Exceed £16,000,000

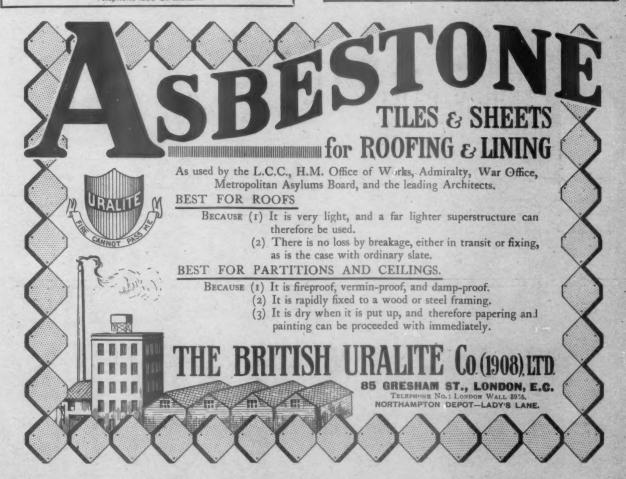
Claims Paid Exceed £94,000,000

MARINE FIRE - LIFE -

ACCIDENT - BURGLARY.

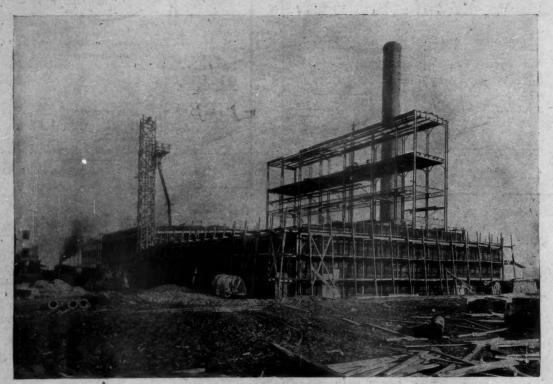
Annuities Granted on Favourable Terms.

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